IN THE CLAIMS:

Please cancel claims 1-19, 29-42, and 46-48, and amend and add new claims as follows:

Claims 1-19. (Cancelled)

Claim 20. (Currently Amended) A cardiomyocyte cell having an introduced nucleic acid molecule encoding a cyclin D2 protein.

Claim 21. (Currently Amended) The cell of claim 20, wherein said introduced nucleic acid molecule has a nucleotide sequence ~~corresponding to~~ of nucleotides 4 to 870 of SEQ. I.D. NO. 1 or SEQ. I.D. NO. 3, or a nucleotide sequence having substantial identity thereto.

Claim 22. (Currently Amended) The cell of claim 21, wherein said introduced nucleic acid molecule encodes a polypeptide having the amino acid sequence of SEQ. I.D. NO. 2 or SEQ. I.D. NO. 4, or a polypeptide having an amino acid sequence at least 70% identical to the amino acid sequence of SEQ. I.D. NO. 2 or SEQ. I.D. NO. 4, and which exhibits cyclin D2 activity.

Claim 23. (Original) The cell of claim 20, wherein said nucleotide sequence is operably linked to a promoter.

Claim 24. (Original) The cell of claim 23, wherein said promoter is a

constitutive promoter.

Claim 25. (Original) The cell of claim 23, wherein said promoter is an inducible promoter.

Claim 26. (Original) The cell of claim 23, wherein said promoter is a cardiomyocyte specific promoter.

Claim 27. (Original) The cell of claim 20, wherein said cardiomyocyte cell is a mammalian cardiomyocyte cell.

Claim 28. (Original) The cell of claim 20, wherein said cardiomyocyte cell is a human cardiomyocyte cell.

Claims 29-42. (Cancelled)

Claim 43. (Original) A method for providing proliferative cardiomyocytes in a mammal, comprising:

providing cardiomyocytes in a mammal, said cardiomyocytes responsive to an agent to increase the proliferative capacity of said cardiomyocytes; and

administering said agent to the mammal so as to increase the proliferative capacity of the cardiomyocytes.

Claim 44. (Original) The method of claim 43, wherein said

cardiomyocytes contain introduced DNA encoding a cyclin D2 protein.

Claim 45. (Original) The method of claim 44, wherein said introduced DNA is operatively linked to an inducible promoter, and said agent causes induction of said inducible promoter.

Claims 46-48. (Cancelled)

Claim 49. (New) The cell of claim 20, wherein said nucleic acid molecule has a nucleotide sequence of nucleotides 4 to 870 of SEQ. I.D. NO. 1.

Claim 50. (New) The cell of claim 20, wherein said nucleic acid molecule has a nucleotide sequence of nucleotides 4 to 870 of SEQ. I.D. NO. 3.

Claim 51. (New) The cell of claim 20, wherein said nucleic acid molecule said introduced nucleic acid molecule encodes a polypeptide having the amino acid sequence of SEQ. I.D. NO. 2.

Claim 52. (New) The cell of claim 20, wherein said nucleic acid molecule said introduced nucleic acid molecule encodes a polypeptide having the amino acid sequence of SEQ. I.D. NO. 4,

Claim 53. (New) A cardiomyocyte cell having an introduced nucleic acid molecule, said introduced nucleic acid molecule having a nucleotide sequence of

nucleotides 4 to 870 of SEQ. I.D. NO. 1 or SEQ. I.D. NO. 3, or having a nucleotide sequence that will hybridize to a nucleotide sequence of nucleotides 4 to 870 of SEQ. I.D. NO. 1 or SEQ. I.D. NO. 3 under stringent conditions, and which encodes a protein having cyclin D2 activity so as to confer upon the cardiomyocyte cell an ability to maintain DNA synthesis in response to treatment with isoproterenol.

Claim 54. (New) A cardiomyocyte cell having an introduced nucleic acid molecule having a nucleotide sequence that encodes a polypeptide having the amino acid sequence of SEQ. I.D. NO. 2 or SEQ. I.D. NO. 4 or an amino acid sequence at least 90% identical to the amino acid sequence of SEQ. I.D. NO. 2 or SEQ. I.D. NO. 4, and wherein the polypeptide exhibits cyclin D2 activity so as to confer upon the cardiomyocyte cell an ability to maintain DNA synthesis in response to treatment with isoproterenol.

Claim 55. (New) The cardiomyocyte cell of claim 54, wherein said nucleotide sequence encodes a polypeptide further having the amino acid sequence of amino acid residues 200 to 280 of SEQ. I.D. NO. 2 or SEQ. I.D. NO. 4 or an amino acid sequence at least 90% identical to amino acid residues 200 to 280 of SEQ. I.D. NO. 2 or SEQ. I.D. NO. 4.

Claim 56. (New) The cardiomyocyte cell of claim 55, wherein said polypeptide has only GSK3 kinase phosphorylation sites.

Claim 57. (New) The cardiomyocyte cell of claim 54, wherein said

nucleotide sequence is operably linked to a promoter.

Claim 58. (New) The cardiomyocyte cell of claim 57, wherein said promoter is a constitutive promoter.

Claim 59. (New) The cardiomyocyte cell of claim 57, wherein said promoter is an inducible promoter.

Claim 60. (New) The cardiomyocyte cell of claim 57, wherein said promoter is a cardiomyocyte specific promoter.

Claim 61. (New) The cardiomyocyte cell of claim 54, wherein said cardiomyocyte cell is a mammalian cardiomyocyte cell.

Claim 62. (New) The cardiomyocyte cell of claim 54, wherein said cardiomyocyte cell is a human cardiomyocyte cell.

Claim 63. (New) A screening method for obtaining information on the activity of an agent, comprising contacting a cardiomyocyte cell according to claim 53 with the agent and obtaining therefrom information on the activity of the agent.

Claim 64. (New) The screening method of claim 63, wherein the cardiomyocyte cell is mammalian.

Claim 65. (New) The screening method of claim 64, wherein the cardiomyocyte cell is human.

Claim 66. (New) A screening method for obtaining information on the activity of an agent, comprising contacting a cardiomyocyte cell according to claim 54 with the agent and obtaining therefrom information on the activity of the agent.

Claim 67. (New) The screening method of claim 66, wherein the cardiomyocyte cell is mammalian.

Claim 68. (New) The screening method of claim 67, wherein the cardiomyocyte cell is human.

Claim 69. (New) A screening method for obtaining information on the activity of an agent, comprising contacting a cardiomyocyte cell according to claim 1 with the agent and obtaining therefrom information on the activity of the agent.

Claim 70. (New) The screening method of claim 69, wherein the cardiomyocyte cell is mammalian.

Claim 71. (New) The screening method of claim 70, wherein the cardiomyocyte cell is human.

Claim 72. (New) The screening method of claim 70, wherein the

cardiomyocyte cell has an introduced nucleic acid molecule having a nucleotide sequence of nucleotides 4 to 870 of SEQ. I.D. NO. 1.

Claim 73. (New) The screening method of claim 70, wherein the cardiomyocyte cell has an introduced nucleic acid molecule having a nucleotide sequence of nucleotides 4 to 870 of SEQ. I.D. NO. 3.

Claim 74. (New) A method for providing a proliferative cardiomyocyte cell in a mammal, comprising providing in the mammal a cardiomyocyte cell according to claim 53.

Claim 75. (New) The method of claim 74, wherein the cardiomyocyte cell is mammalian.

Claim 76. (New) The method of claim 75, wherein the cardiomyocyte cell is human.

Claim 77. (New) A method for providing a proliferative cardiomyocyte cell in a mammal, comprising providing in the mammal a cardiomyocyte cell according to claim 54.

Claim 78. (New) The method of claim 77, wherein the cardiomyocyte cell is mammalian.

Claim 79. (New) The method of claim 78, wherein the cardiomyocyte cell is human.

Claim 80. (New) A method for providing a proliferative cardiomyocyte cell in a mammal, comprising providing in the mammal a cardiomyocyte cell according to claim 1.

Claim 81. (New) The method of claim 80, wherein the cardiomyocyte cell is mammalian.

Claim 82. (New) The method of claim 81, wherein the cardiomyocyte cell is human.

Claim 83. (New) The method of claim 81, wherein the cardiomyocyte cell has an introduced nucleic acid molecule having a nucleotide sequence of nucleotides 4 to 870 of SEQ. I.D. NO. 1.

Claim 84. (New) The method of claim 81, wherein the cardiomyocyte cell has an introduced nucleic acid molecule having a nucleotide sequence of nucleotides 4 to 870 of SEQ. I.D. NO. 3.